UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,420	01/11/2006	· Oscar Hendrikus Willemsen	NL 030829	8965
24737 7590 10/16/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001			EXAMINER	
			DOAK, JENNIFER L	
BRIARCLIFF	MANOR, NY 10510		ART UNIT PAPER NUMBER	
	·		2872	
			MAIL DATE	DELIVERY MODE
			10/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summary	10/564,420	WILLEMSEN, OSCAR HENDRIKUS				
Office Action Summary	Examiner .	Art Unit				
	Jennifer L. Doak	2872				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status		·				
1) Responsive to communication(s) filed on 22 A	Nugust 2007.	*				
	'_ '					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.						
4a) Of the above claim(s) <u>6</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-5</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examina	er .					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
		ed in this National Stage				
application from the International Burea * See the attached detailed Office action for a list		ad				
See the attached detailed Office action for a list	tof the certified copies not receive	su.				
	,	·.				
Attachment(s)						
Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
Paper No(s)/Mail Date Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application						
Paper No(s)/Mail Date <u>8/15/07</u> .	6) Other: Berge refere					

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 8/15/07 has been considered by the examiner. However, Examiner suspects that a typographical error occurred, since cited reference US 6,416,158 is directed to Ballistic Aerosol Marking (and not to any sort of optical system or element), and it does not appear to have an inventor named Smith, as described in the IDS. Additionally, although the Non-Patent Literature document was not previously entered into the record in its entirety, Examiner was able to locate it on IEEExplore, and it is included herewith so as to be fully entered into the record.

Election/Restrictions

Newly submitted claim 6 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The claims can be broken into the following groups:

Group I: Claims 2-3, drawn to lens element, classified in class 359, subclass 365.

Group II: Claims 4-5, drawn to the scanner, classified in class 359, subclass 202.

Group III: Claim 6, drawn to a rear display, classified in class 353, subclass 31.

Inventions I, II, and III are directed to related products. The related inventions are distinct if (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants.

See MPEP § 806.05(j). In the instant case, the inventions as claimed have materially different functions and effects. Furthermore, the inventions as claimed do not encompass overlapping

subject matter since each invention includes mutually exclusive subject matter not found in the other inventions, as set forth above in the listing of inventions, and there is nothing of record to show them to be obvious variants.

Claim 1 is a linking claim for Groups I-III.

Since applicant has received an action on the merits for the originally presented invention (Groups I and II), this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 6 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (US 6,317,170) (hereinafter Hwang) in view of Aizenberg et al. (US 2004/0174610) (hereinafter Aizenberg).

Regarding Claims 1-3, Hwang et al. disclosed a projection device, comprising:

- means for directing a plurality of light beams (150) onto
- a scanning device (900), adapted to scan the beams in order to project
- an image on a surface (1000),
- a lens is arranged in the optical path of the beams after the scanner so that the scanner is located between the lens and its focal length (col. 2, line 41-45);

Hwang et al. fails to teach that an adjustable lens arranged in the optical path of the beams after the scanner so that the scanner is located between the lens and its focal length; Hwang et al. fails to teach that the lens is an electro-wetting lens wherein the lens has at least two refractive planes. Aizenberg et al. discloses an adjustable lens (Figs. 1B and 1C; para. [0022], [0033]-[0035]); wherein the lens is an electro-wetting lens (para. [0022], [0033]-[0035]); the lens has at least two refractive planes (para. [0030]), insofar as the confining liquid and the refractive optical lens have different refractive indices wherein lies a plane in each.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hwang to include the adjustable, electro-wetting lens of Aizenberg, since the adjustable, electro-wetting lens has a tunable or adjustable focal length and transmissivity and did so in a manner that reduces complication and expense.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (US 6,317,170), (hereinafter Hwang), in view of Aizenberg et al. (US 2004/0174610), (hereinafter Aizenberg), in further view of Callison et al. (US 2002/0180869), (hereinafter Callison).

Regarding Claim 4 and 5, the modified Hwang and Aizenberg disclose all the elements of Claim 1, from which this claim depends. Hwang further discloses that the beams are of different color (Fig. 3: (150); col. 8, lines 36-59), wherein the projection device comprises means to modulate (Fig. 3:(700); col. 8, lines 36-59) the beams and to form one combined beam (Fig. 3). Hwang et al. fails to disclose that the scanner is a two-dimensional scanner arranged to scan the combined beam in a raster pattern, and further that the scanner is arranged to scan the array of beams in a second direction. Hwang and Callison et al are related as projection devices. Callison

teaches that a scanner (Fig. 9) is a two-dimensional scanner arranged to scan the combined beam in a raster pattern (Abstr). Callison et al. further teaches that the scanner is arranged to scan an array of beams in a second direction (Abstr.; para. [0025]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hwang to include the two-dimensional scanner as taught in Callison, since simultaneous raster scanning of multiple lines enables higher resolution, brightness, and frame rates with available economical components.

Response to Arguments

Applicant's arguments filed 8/22/07 have been fully considered but they are not persuasive.

Applicant argues that the scanning system of Hwang's Fig. 3 should not be that shown in Fig. 1, since it is indicated as Prior art; that the size of the image in Hwang is determined by the scanning system and not an adjustable lens; that Hwang teaches away from an adjustable lens, and that Huang does not teach an adjustable lens; that the Hwang scanner is not between the adjustable lens and its focal length, and therefore the reference teaches away; that Aizenburg is not a projection device, so there is a teaching away from the combination, and there is no motivation to combine with reasonable expectation of success; and Examiner used impermissible hindsight.

However, Hwang's Fig. 3 only recites a means for scanning, and Examiner notes that Fig. 1 (85) is a scanning system. Nothing else in the reference cites a scanning system, so it must have been intended for the system of Fig. 3 as a means of scanning.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., image size

Application/Control Number: 10/564,420

Art Unit: 2872

determination is accomplished) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Hwang does not teach an adjustable lens, nor was that element the purpose of citing it as a reference, as is clearly shown in the *Graham v. Deere* analysis of the First Action. Applicant argues that the reference teaches away. However, it has been held that such nonpreferred embodiments failing to assert discovery beyond that known in the art does not constitute a "teaching away" unless such disclosure criticizes, discredits, or otherwise discourages the solution claimed. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971), *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994), In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004), (see MPEP §2124).

Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). (MPEP §2124).

In this case, neither discredit was attributed to the combination by the references, nor does the combination destroy the references. Mere lack of mention does not "teach away." Examiner finds no teaching away.

In response to Applicant's argument that the Hwang scanner is not between the adjustable lens and focal length, Examiner notes that the scanner of Hwang's Fig. 1 is within the optical focal length of lenses (34). Applicant did not explicitly disclose whether the scanner was

optically or physically between the lens and its focal length, and therefore, Examiner has read the limitation broadly, making a reasonable interpretation that the scanner is optically between the lens and its focal point. Additionally, no discredit or destruction of references results, therefore there is no teaching away.

In response to Applicant's argument that Aizenburg is not a projection device and therefore there would be no reasonable expectation of success and thus teaches away from the combination, it should be noted that "Obviousness does not require absolute predictability, however, at least some degree of predictability is required. Evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness. In re Rinehart, 531 F.2d 1048, 189 USPO 143 (CCPA 1976)," as cited at MPEP §2143.02. In this case, the references cited are related as optical system and optical element, both classified in US Class 359, therefore Examiner finds reasonable expectation of success. Applicant is invited to supply evidence to support a conclusion of no reasonable expectation of success, at which time this issue would be reconsidered. Additionally, it should be noted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Further, and again, no discredit or destruction of references results, therefore there is no teaching away.

In response to Applicant's allegation that there is no motivation to combine, Applicant is reminded that motivation was supplied as part of the original Office Action, and is reasserted

here: one would have been motivated to make the combination since the adjustable, electrowetting lens has a tunable or adjustable focal length and transmissivity and did so in a manner that reduces complication and expense. This motivation was found in Aizenburg on page 1.

Finally, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Doak whose telephone number is 571-272-9791. The examiner can normally be reached on Mon-Thur: 7:30A-5:00P, Alt Fri: 7:30A-4:00P (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD 10/04/07

Supervisory Patent Examiner